

## 09484600 PANTANO WASH NEAR VAIL, AZ

**LOCATION.**--Lat 32°02'09", long 110°40'37", in SW1/4SE1/4 sec. 14, T.16 S., R.16 E., Pima County, Hydrologic Unit 15050302, on right bank 60 ft upstream from dam, 2.2 mi southeast of Vail, and 20 mi southeast of Tucson City Hall.

**DRAINAGE AREA.**--457 mi<sup>2</sup>.

**PERIOD OF RECORD.**--Jan. 1959 to Sept. 1974, water years 1975--89 (annual maximums only), Oct. 1989 to current year.

**GAGE.**--Water-stage recorder and concrete weir. Elevation of gage is 3,205 ft above sea level, from topographic map. Jan. 1959 to Sept. 1974 (water-stage recorder) and Oct. 1974 to Sept. 1989 (crest-stage gage) at same site and datum.

**REMARKS.**--Records fair, except for estimated daily discharges, which are poor. No known diversion above station. Records published herein represent flow by gage. Infiltration flow is not included. Base runoff past gage station consists of downvalley underflow that is brought to the surface by the concrete dam 60 ft downstream, which extends to bedrock.

**EXTREMES FOR PERIOD OF RECORD.**--Maximum discharge, 12,000 ft<sup>3</sup>/s Oct. 1 or 2, 1983, gage height, 15.25 ft, from inside highwater mark, from rating curve extended above 2,000 ft<sup>3</sup>/s on basis of slope-area measurements at gage heights 10.9 and 24 ft; no flow June 26 to July 13, Aug. 7, 1971 (result of work on infiltration gallery), June 27 to July 13, 1973 (result of ponding during construction work on dam), May 28 to June 12, and July 12, 13, 17, and 18, 1974.

**EXTREMES OUTSIDE PERIOD OF RECORD.**--Maximum discharge since at least 1930, about 38,000 ft<sup>3</sup>/s, Aug. 11, 1958, gage height, about 24 ft, from floodmark, from slope-area measurement.

**EXTREMES FOR CURRENT YEAR.**--Peak discharges greater than base discharge of 2,000 ft<sup>3</sup>/s and (or) maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Sept. 9 .....	1700	*2,030	*8.30

Minimum daily discharge, 0.04 ft<sup>3</sup>/s, May 31.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.45	0.40	0.47	0.16	0.09	0.41	0.40	0.68	0.07	0.22	2.4	3.8
2	0.45	0.40	0.47	0.16	0.08	0.41	0.40	0.69	0.12	0.22	5.0	1.2
3	0.44	0.40	0.47	0.17	0.08	0.44	0.40	0.72	0.10	0.23	3.5	1.2
4	0.38	0.40	0.47	0.16	0.10	0.45	0.40	0.74	0.09	0.23	8.3	1.3
5	0.39	0.40	0.47	0.16	0.09	0.40	0.40	0.75	0.07	0.21	1.5	1.3
6	0.39	0.40	0.47	0.13	0.10	0.42	0.40	0.79	0.07	0.24	1.3	1.3
7	0.40	0.41	0.47	0.13	0.12	0.40	0.40	0.82	0.06	0.26	3.4	1.3
8	0.39	0.41	0.47	0.12	0.14	0.40	0.40	0.83	0.05	0.27	23	4.0
9	0.39	0.40	0.47	0.12	0.15	0.37	0.40	0.82	0.05	0.27	4.4	e190
10	0.40	0.40	0.47	0.13	0.13	0.33	0.40	0.86	0.06	0.28	49	e1.0
11	0.40	0.40	0.47	0.15	0.14	0.32	0.40	0.88	0.08	0.30	13	e0.74
12	0.40	0.40	0.47	0.15	0.19	0.35	0.40	0.87	0.10	0.31	5.2	e0.69
13	0.40	0.40	0.48	0.16	0.16	0.35	0.40	0.87	0.12	0.34	11	e0.54
14	0.40	0.42	0.53	0.17	0.17	0.35	0.40	0.86	0.14	0.33	110	0.54
15	0.40	0.47	0.54	0.20	0.19	0.35	0.41	0.84	0.16	0.32	e75	0.54
16	0.40	0.47	0.54	0.26	0.23	0.35	0.44	0.83	0.15	0.32	e0.67	0.54
17	0.40	0.47	0.54	0.32	0.30	0.36	0.44	0.85	0.13	0.33	0.57	0.55
18	0.40	0.47	0.54	0.24	0.35	0.38	0.45	0.87	0.14	0.34	0.50	0.57
19	0.40	0.47	0.54	0.21	0.33	0.40	0.45	0.87	0.15	0.36	0.47	0.59
20	0.40	0.47	0.54	0.23	0.36	0.40	0.46	0.86	0.17	0.38	0.46	0.54
21	0.40	0.47	0.47	3.9	0.33	0.40	0.45	0.82	0.17	0.39	0.45	0.58
22	0.40	0.47	0.42	0.19	0.33	0.39	0.44	0.80	0.16	0.39	22	0.62
23	0.40	0.47	0.38	0.15	0.33	0.39	0.44	0.82	0.16	0.48	e401	0.62
24	0.40	0.47	0.35	0.13	0.33	0.40	0.53	0.82	0.18	0.54	e3.7	0.60
25	0.40	0.47	0.31	0.13	0.38	0.40	0.57	0.85	0.18	0.54	e2.0	0.60
26	0.40	0.47	0.30	0.13	0.41	0.39	0.58	0.88	0.19	0.52	e1.8	0.54
27	0.40	0.47	0.28	0.16	0.44	0.39	0.59	25	0.19	77	1.9	0.49
28	0.40	0.47	0.23	0.10	0.42	0.39	0.62	0.14	0.21	0.31	1.8	0.47
29	0.40	0.47	0.20	0.10	---	0.40	0.68	0.08	0.22	0.17	1.8	0.45
30	0.40	0.47	0.20	0.10	---	0.40	0.69	0.06	0.22	31	1.7	0.45
31	0.40	---	0.16	0.10	---	0.40	---	0.04	---	87	1.8	---
TOTAL	12.48	13.16	13.19	8.72	6.47	11.99	13.84	46.61	3.96	204.10	758.62	217.66
MEAN	0.40	0.44	0.43	0.28	0.23	0.39	0.46	1.50	0.13	6.58	24.5	7.26
MAX	0.45	0.47	0.54	3.9	0.44	0.45	0.69	25	0.22	87	401	190
MIN	0.38	0.40	0.16	0.10	0.08	0.32	0.40	0.04	0.05	0.17	0.45	0.45
AC-FT	25	26	26	17	13	24	27	92	7.9	405	1500	432
CFSM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.05	0.02
IN.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.06	0.02

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 2005, BY WATER YEAR (WY)

	MEAN	3.01	2.27	4.95	6.21	5.96	3.35	2.10	1.19	1.64	12.7	18.7	9.24
MAX	45.6	38.7	50.3	111	75.1	21.2	12.0	2.62	20.8	49.6	92.6	105	
(WY)	2001	2001	1966	1993	1998	1998	1998	2004	2000	1967	1971	1964	
MIN	0.10	0.10	0.10	0.09	0.10	0.12	0.32	0.19	0.07	0.22	0.52	0.16	
(WY)	1974	1974	1974	2003	1974	1974	1974	1974	1974	1997	1973	1973	

SUMMARY STATISTICS FOR 2004 CALENDAR YEAR FOR 2005 WATER YEAR WATER YEARS 1960 - 2005

ANNUAL TOTAL	991.99	1310.80	
ANNUAL MEAN	2.71	3.59	5.96
HIGHEST ANNUAL MEAN			15.7
LOWEST ANNUAL MEAN			1.44
HIGHEST DAILY MEAN	272	Aug 5	401
LOWEST DAILY MEAN	0.14	Apr 7	0.04
ANNUAL SEVEN-DAY MINIMUM	0.16	Apr 6	0.06
ANNUAL RUNOFF (AC-FT)	1970	2600	4320
ANNUAL RUNOFF (CFSM)	0.006	0.008	0.013
ANNUAL RUNOFF (INCHES)	0.08	0.11	0.18
10 PERCENT EXCEEDS	2.0	1.3	4.2
50 PERCENT EXCEEDS	0.49	0.40	1.1
90 PERCENT EXCEEDS	0.29	0.13	0.30

e Estimated